Weekly Summary Report
USEPA Oversight, Sauget Area 1, Sauget, IL
WA No. 239-RSBD-054V / Contract No. 68-W6-0025

Week Ending Friday May 14, 2004

This report summarizes the Remedial Investigation/Feasibility Study (RI/FS) fieldwork conducted by Monsanto, Solutia and their contractors from May 10, 2004 through May 14, 2004 at Sauget Area 1 Sites. The current RI/FS work consists of a dense non-aqueous phase liquid (DNAPL) Characterization and Remediation Study. CH2M HILL provided field oversight of work between May 11, and May 14, 2004.

Contractors Onsite

Golder Associates (consultant for Monsanto/Solutia)
Groundwater Services Inc. (contractor for Monsanto/Solutia)

Work Performed This Week

Groundwater Services Inc. (GSI) was onsite during the week conducting the DNAPL and light non-aqueous phase liquid (LNAPL) survey of existing wells at Sauget Area 1. This phase of work is part of Task 2 of the GSI Work Plan for the DNAPL Characterization and Remediation Study.

NAPL Survey at Existing Wells

Twenty-seven existing monitoring wells, located across Area 1, were surveyed for DNAPL and LNAPL during the week. Of these wells, measurements could not be collected at well EEG-109 due to well damage. Additionally, measurements at well ST-N-S are likely unreliable due to well damage.

During the week, no indication of LNAPL or DNAPL was found during the tests conducted at the existing wells surveyed. Consequently, no recovery tests were performed this week. Table 1 shows a comprehensive list of all wells included in the NAPL survey, and the results from wells surveyed through May 14, 2004.

Three wells (P1-A-S, P1-A-M, and P1-A-D) were surveyed by GSI initially on May 10, 2004. These wells were resurveyed with USEPA oversight on May 14, 2004.

The DNAPL and LNAPL survey consisted of the following measurements at each well:

- An oil-water interface probe was used to measure depth to LNAPL and/or DNAPL, the depth to water, and the total well depth.
- A weighted cotton string was dropped to the bottom of the well, then removed and inspected for evidence of staining (which if present could be indicative of NAPL).

- A teflon bailer was lowered through the top of the water column present inside the well. The bailer was then raised from the well and inspected for the presence of a sheen or LNAPL.
- A teflon bailer was lowered to the total depth of the well bailer. The balier was then retrieved and visually observed for presence of a sheen or DNAPL.

As noted below in Table 1, some shallow wells were found to be dry.

Work Anticipated Next Week

To reduce the chance for cross-contaminating wells across Area 1, wells in which NAPL is most likely present will be surveyed last. For this reason, the three bedrock wells included in the NAPL survey will be addressed toward the end of the survey. Approximately thirty-one wells will be surveyed next week to complete the NAPL survey. Note that well EE-11, which was not included in the GSI Work Plan of existing wells to be surveyed, will be surveyed next week.

TABLE 1
DNAPL Survey of Existing Wells, Oversight of Field Measurements for the week ending May 14, 2004

Site	Well ID	Historical DNAPL Thickness (feet)	Date Surveyed	NAPL Observations	Comments
Site G	BR-G				
	EE-05				
	EEG-101	9.19			
	EEG-102	9.20			
	EEG-104	12.73			
	EEG-106	10.35			
	EEG-107	18.54			
	EEG-112	11.04	5/14/04	None detected	
	ST-G-S				
	ST-G-M				
	ST-G-D				
Site H	BR-H				
	EE-01	23.29			
	EE-02				
	EE-03	20.78			
	EE-04	8.44			
	EEG-110	13.14			
	P2-C-S	1.96	5/13/04	None detected	
	P2-C-M	3.45	5/13/04	None detected	
	P2-C-D	0.26	5/13/04	None detected	
	ST-H-S				
	ST-H-M				
	ST-H-D				
Site I	BR-I				
	EE-12				
	EE-13				
	EE-14				
	EE-15				
	EE-20	14.88			
	P1-A-S	1.88	5/14/04	None detected	Well dry. P1-A cluster first surveyed by GSI on 5/10/04, resurveyed with EPA oversight on 5/14/04
	P1-A-M	3.29	5/14/04	None detected	
	P1-A-D	3.33	5/14/04	None detected	
	P1-B-S	1.97	5/14/04	None detected	Well dry
	P1-B-M	3.80	5/14/04	None detected	
	P1-B-D	0.56	5/14/04	None detected	
	P1-C-S	0.17	5/14/04	None detected	Well dry
	P1-C-M	3.96	5/14/04	None detected	

TABLE 1
DNAPL Survey of Existing Wells, Oversight of Field Measurements for the week ending May 14, 2004

Site	Well ID	Historical DNAPL Thickness (feet)	Date Surveyed	NAPL Observations	Comments
Site I	P1-C-D	0.81	5/14/04	None detected	
(cont'd)	ST-H-S				
	ST-H-M				
	ST-H-D				
Site L	EEG-103				
	EEG-105				
	EEG-108	19.38	5/13/04	None detected	
	EEG-109	11.87	5/13/04	NA	Well Damaged, bent at ground surface, refusal of oil-water interface probe at bend in well.
	ST-L-S				
	ST-L-M				
	ST-L-D				
Sites M or N	EEG-111				
	P2-A-S	None			
	P2-A-M	3.64			
	P2-A-D	6.69			
	P2-B-S	None			
	P2-B-M	None			
	P2-B-D	None			
	P3-A-S	1.55	5/13/04	None detected	Well dry
	P3-A-M	3.67	5/13/04	None detected	
	P3-A-D	3.79	5/13/04	None detected	
	P3-B-S	2.71	5/13/04	None detected	
	P3-B-M	3.24	5/13/04	None detected	
	P3-B-D	None	5/13/04	None detected	
	P3-C-S		5/14/04	None detected	
	P3-C-M		5/14/04	None detected	
	P3-C-D		5/14/04	None detected	
	ST-N-S		5/14/04	None detected	Well broken - surface
	ST-N-M		5/14/04	None detected	
	ST-N-D		5/14/04	None detected	
	EE-11	Full depth			Not listed in GSI WP – well will be surveyed.

Notes:
Historical DNAPL Thickness – Taken from Table 4-0c, US Army Corps of Engineers Report, compiled from field notes 1999-2000.
NA = Not Available/Not Measured

Photos from May 10, through May 14, 2004:

Damaged well EEG-109 could not be surveyed due to bend in well (May 13, 2004).

Damaged well ST-N-S: well completion was completely disconnected from well, soils have likely washed from surface into well causing it to be plugged at approximately 11 below ground surface (May 14, 2004).

Measuring depth to water with oil-water interface probe at well EEG-108 (May 13, 2004).

Well ST-N-D contained black silts suspended in water from the base of the well, but no indication of NAPL (May 14, 2004).